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JCS96 U.S. PTO

Sir:

Transmitted herewith for filing is the patent application of

Inventor: Joseph L. Christie

For: Umbrella Mountable On A Backpack

JCS96 U.S. PTO  
09/651967

08/31/00

Enclosed are:

2 sheets of drawing.

An assignment of the invention to \_\_\_\_\_

A certified copy of a \_\_\_\_\_ application.

An associate power of attorney.

A verified statement to establish small entity status under 37 CFR 1.9 and 37 CFR 1.27.

The filing fee has been calculated as shown below:

	(Col. 1)	(Col. 2)
FOR:	NO. FILED	NO. EXTRA
BASIC FEE		
TOTAL CLAIMS	-20= *	
INDEP CLAIMS	-3= *	
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENTED		

\* If the difference in Col. 1 is less than zero, enter "0" in Col. 2

SMALL ENTITY	
RATE	FEES
	\$ . . .
x =	\$ . . .
x =	\$ . . .
+ =	\$ . . .
TOTAL	\$345

OTHER THAN A  
SMALL ENTITY

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RATE	FEES
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Any patent application processing fees under 37 CFR 1.17.

The issue fee set in 37 CFR 1.18 at or before mailing of the Notice of Allowance, pursuant to 37 CFR 1.311(b).

Any filing fees under 37 CFR 1.16 for presentation of extra claims.

Applicant or Patentee: Joseph L. Christie  
Serial or Patent No.: \_\_\_\_\_  
Filed or Issued: \_\_\_\_\_  
For: UMBRELLA MOUNTABLE ON A BACKPACK

**VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS (37 CFR 1.9(f) AND 1.27(b)) - INDEPENDENT INVENTOR**

As a below named inventor, I hereby declare that I qualify as an independent inventor as defined in 37 CFR 1.9(c) for purposes of paying reduced fees under section 41(a) and (b) of Title 35, United State Code, to the Patent and Trademark Office with regard to the invention entitled the same as above, and described in the specification filed herewith.

I have not assigned, granted, conveyed or licensed and am under no obligation under contract or law to assign, grant, convey or license, any rights in the invention to any person who could not be classified as an independent inventor under 37 CFR 1.9(c) if that person had made the invention, or to any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern or organization to which I have assigned, granted or  
 conveyed, or licensed or am under obligation under contract or law to  
 assign, grant, convey or license any rights in the invention is listed  
 below:

[x] no such person, concern or organization  
[ ] persons, concerns or organizations listed below

**FULL NAME** \_\_\_\_\_

ADDRESS \_\_\_\_\_

[ ] INDIVIDUAL      [ ] SMALL BUSINESS CONCERN      [ ] NONPROFIT ORGANIZATION

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

Joseph L. Christie

NAME OF INVENTOR

**NAME OF INVENTOR**

NAME OF INVENTOR

Signature of Inventor

**Signature of Inventor**

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**Signature of Inventor**

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## Symptoms of infection

Signature of Inventor

Date

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TITLE: UMBRELLA MOUNTABLE ON A BACKPACK

BACKGROUND OF THE INVENTION

1. Field of the Invention

5 This invention relates to an umbrella, and more particularly concerns an umbrella which can be supported by a backpack worn by the user.

2. Description of the Prior Art

Umbrellas intended for hand-held use are generally comprised 10 of a collapsible canopy, an elongated shaft that is usually telescopically extendable, and a holding handle disposed at the lower extremity of the shaft. Such umbrellas have long been used by persons desiring to shield themselves from the sun and rain. It is well established that, from a health standpoint, it is desirable to minimize exposure to direct sunlight.

Conventionally, umbrellas are hand carried by the person using the umbrella. Carrying an umbrella, however does not allow the free use of a person's hands to carry packages or the like, or perform other functions. It is therefore desirable to provide an 20 improved umbrella that will allow a person using the umbrella to use their hands without being encumbered by the umbrella.

While umbrellas have heretofore been strapped to the back of a person, they are difficult to attach and the harnesses are clumsy. Further, such harnesses must be detached if the umbrella is to be 25 hand-held, as is conventional. It is therefore desirable to provide an umbrella which can be worn, if desired, but which includes structure which allows the umbrella to be worn or hand-

held, as desired, while still being convenient to use and conveniently stored.

Examples of such back-mounted umbrellas are disclosed in U.S. Patents D330,455; D345,856; D361,654; 3,892,251 and 4,188,965. In general, such back-mounted umbrellas involve a harness which either secures an umbrella of usual construction having a bottom handle, or secures a specially constructed umbrella having a straight shaft that removably inserts into a holding structure associated with the harness.

A common shortcoming of prior back-mounted umbrellas is that the umbrella tends to rotate within the holding structure, particularly in strong winds. Also, tilting movements in both the path of the person's walking movement and in the lateral or transverse direction are difficult to control. When a specialized harness is employed, it is difficult to emplace and is restrictive, and serves no other useful purpose.

Backpack carrying units are in commonplace use by hikers, campers and school students. The usual backpack is comprised of a storage compartment adapted to be worn on the back and secured by paired shoulder straps and a waist belt.

It is accordingly an object of the present invention to provide an umbrella and backpack combination wherein the backpack provides support for the umbrella.

It is a further object of this invention to provide the combination of the foregoing object wherein the umbrella is easily attached to and removed from the backpack.

It is another object of the present invention to provide the

combination of the aforesaid nature wherein the umbrella, in its deployed, open state is stabilized with respect to rotative and tilting movements.

It is yet another object of this invention to provide the  
5 combination of the aforesaid nature wherein said backpack contains means for securing said umbrella in its collapsed, storage state.

It is a still further object of the present invention to provide the combination of the aforesaid nature wherein the separate functionality of umbrella and backpack remains unimpaired.  
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These objects and other objects and advantages of the invention will be apparent from the following description.

SUMMARY OF THE INVENTION

The above and other beneficial objects and advantages are accomplished in accordance with the present invention by an umbrella and backpack combination comprising:  
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- a) an umbrella comprising a collapsible canopy and a straight center shaft interactive with said canopy and extending to a lower terminal extremity having spring biased locking means,
- 20 b) a backpack having a storage compartment bounded in part by forward and rearward surfaces, and paired shoulder straps and a waist strap associated with said forward surface, and
- c) umbrella holding means associated with the forward surface of said backpack and comprising a vertically disposed tubular receiver and horizontally disposed stabilizing means attached to said receiver.  
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BRIEF DESCRIPTION OF THE DRAWING

For a fuller understanding of the nature and objects of the invention, reference should be had to the following detailed description taken in connection with the accompanying drawing forming a part of this specification and in which similar numerals of reference indicate corresponding parts in all the figures of the drawing:

Figure 1 is a side view of an embodiment of the umbrella and backpack combination of the present invention showing the umbrella in its functionally deployed state.

Figure 2 is a fragmentary exploded front view of the umbrella holding component of the embodiment of Figure 1.

Figure 3 is a vertical sectional view taken in the direction of the arrows upon the line 3-3 of Figure 2.

Figure 4 is a perspective front view of the umbrella and backpack combination of Figure 1, showing the umbrella in its storage state.

Figure 5 is a rear view of the embodiment of Figure 1.

20 DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now to Figures 1-5, an embodiment of the umbrella and backpack combination 10 of the present invention is shown comprised of backpack 11 and umbrella 12.

Backpack 11 is of conventional construction, comprised of a storage compartment 13 fabricated of sturdy fabric such as rip-stop nylon, and bounded in part by forward and rearward surfaces 14 and 15, respectively. Paired vertically oriented shoulder straps 16,

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fabricated of heavy duty fabric belting, are attached by sewing to forward surface 14 adjacent the opposite sides 17 of compartment 13. Said shoulder straps are usually equipped with adjusting buckles 18. A horizontally oriented waist strap 19 is also associated with forward surface 14, and equipped with adjustment buckle 20. A closure flap 35 is attached to the upper extremity of forward surface 14, and extends onto rearward surface 15 for engagement therewith by means of snap connectors 36.

Umbrella holding means in the form of anchoring structure 21 are associated with forward surface 14. Anchoring structure 21 is comprised of a vertically disposed tubular receiver 22 having an open upper extremity 23. The lower portion 41 of said receiver is preferably flattened so as to minimize space occupied within the backpack. At least one horizontally disposed stabilizing means in the form of elongated bar 24 is attached to receiver 22. In the illustrated preferred embodiment, second stabilizing means in the form of bar 25 is disposed upon receiver 22 above bar 24. Said stabilizing bars may be in two halves extending from opposite sides of flattened receiver 22 in coplanar relationship therewith.

Anchoring structure 21 is sandwiched between forward surface 14 and a fabric facing panel 26. Lines of sewing 27 interengage facing panel 26 and forward surface 14 along the entire perimeter outline of said anchoring structure, thereby securing said anchoring structure in proper orientation on the backpack. Other means may, however be employed to secure said anchoring structure to said backpack. Anchoring structure 21 may be fabricated of lightweight metal such as aluminum, or may be fabricated of plastic, in which

case it may be a monolithic structure produced by way of a molding operation.

Umbrella 12 is comprised of collapsible canopy 28 and a straight center shaft 29 interactive in conventional manner with said canopy. Shaft 29, preferably of telescopically extendable tubular construction, extends to a lower terminal extremity 30 equipped with spring biased locking means 31. The exemplified embodiment of said locking means is comprised of diametrically opposed tabs 32 which are outwardly urged from shaft 29 by spring means within said shaft. Tabs 32 are configured and positioned so as to engage matching slots 33 in receiver 22. A push-button control 34 on shaft 29 causes retraction of said tabs with attendant release from receiver 22. A shoulder 37 on shaft 29 is adapted to seat in abutment with the upper extremity 23 of receiver 22. The umbrella, in its collapsed storage state may have a length of between about 10 and 14 inches.

When shaft 29 is inserted into receiver 22 and tabs 32 are functionally deployed in slots 33, the umbrella is sufficiently secure so as to resist rotative movement about the shaft axis, and to resist tilting movement in any direction away from verticality. A hand grip 38 is preferably associated with shaft 29 adjacent said terminal extremity 30. Said hand grip facilitates the use of the umbrella in a conventional hand-held manner detached from the backpack. Holding means, which may be in the form of compartment 39 are associated with the backpack for storage of the umbrella in its collapsed state.

While particular examples of the present invention have been

shown and described, it is apparent that changes and modifications may be made therein without departing from the invention in its broadest aspects. The aim of the appended claims, therefore, is to cover all such changes and modifications as fall within the true spirit and scope of the invention.

Having thus described my invention, what is claimed is:

- 1) An umbrella and backpack combination comprising:
  - a) an umbrella comprising a collapsible canopy and a straight center shaft interactive with said canopy and extending to a lower terminal extremity having spring biased locking means,
  - b) a backpack having a storage compartment bounded in part by forward and rearward fabric surfaces, and having paired shoulder straps and a waist strap associated with said forward surface, and
  - c) umbrella holding means associated with the forward surface of said backpack and comprising a vertically disposed tubular receiver having an open upper extremity, and horizontally disposed stabilizing means attached to said receiver.
- 2) The combination of claim 1 wherein said tubular receiver has a lower portion which is flattened so as to minimize space occupied.
- 3) The combination of claim 2 wherein said stabilizing means is a first elongated bar.
- 4) The combination of claim 3 having a second elongated bar attached said receiver above said first par.
- 5) The combination of claim 4 wherein said first and second bars each exist as two halves extending from opposite sides of the lower portion of said receiver in coplanar relationship.
- 6) The combination of claim 5 wherein said holding means is sandwiched between said forward surface and a parallel fabric

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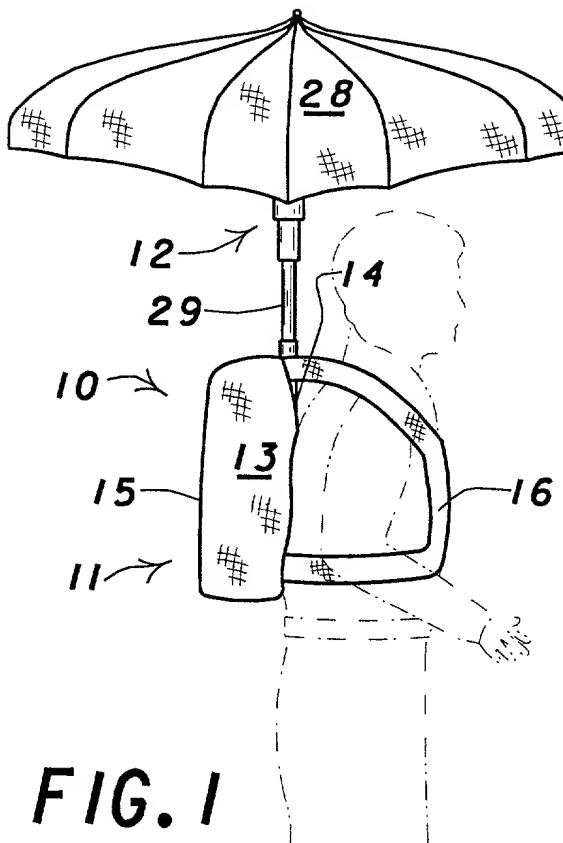
facing panel.

- 7) The combination of claim 6 wherein lines of sewing interengage said forward surface and facing panel along the perimeter of said holding means.
- 5      8) The combination of claim 7 wherein said locking means is comprised of diametrically opposed tabs outwardly urged from said shaft by spring means within said shaft.
- 9) The combination of claim 8 wherein said receiver has slots which receive said tabs.
- 10     10) The combination of claim 1 wherein said umbrella, in its collapsed storage state has a length between 10 and 14 inches.
- 11) The combination of claim 10 wherein said backpack has a compartment for the storage of said umbrella in its collapsed state.

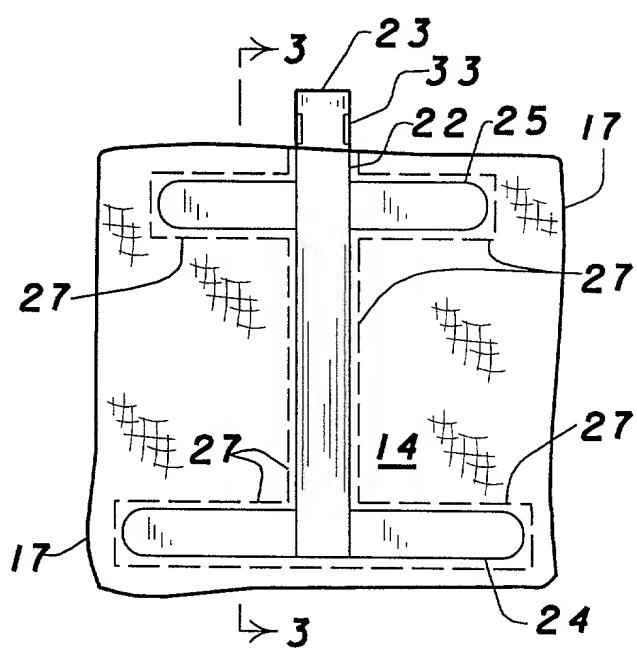
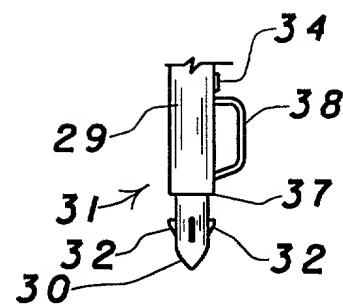
ABSTRACT OF THE DISCLOSURE

An umbrella and backpack combination includes an umbrella having a collapsible canopy and a straight center shaft extending 5 to a lower extremity having a spring-biased locking feature. A backpack having a storage compartment bounded in part by forward and rearward fabric surfaces confines an umbrella holding structure having a vertically disposed tubular receiver and horizontally disposed stabilizing bars attached to the receiver. The lower 10 extremity of the shaft enters the receiver and releasibly locks therewith.

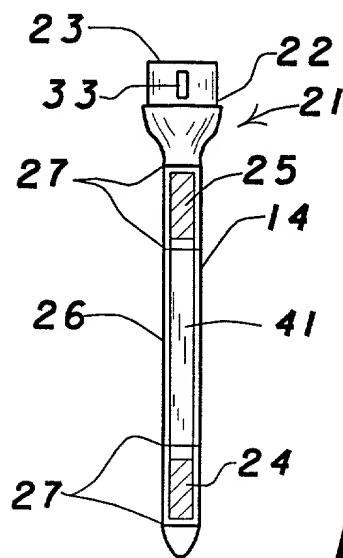
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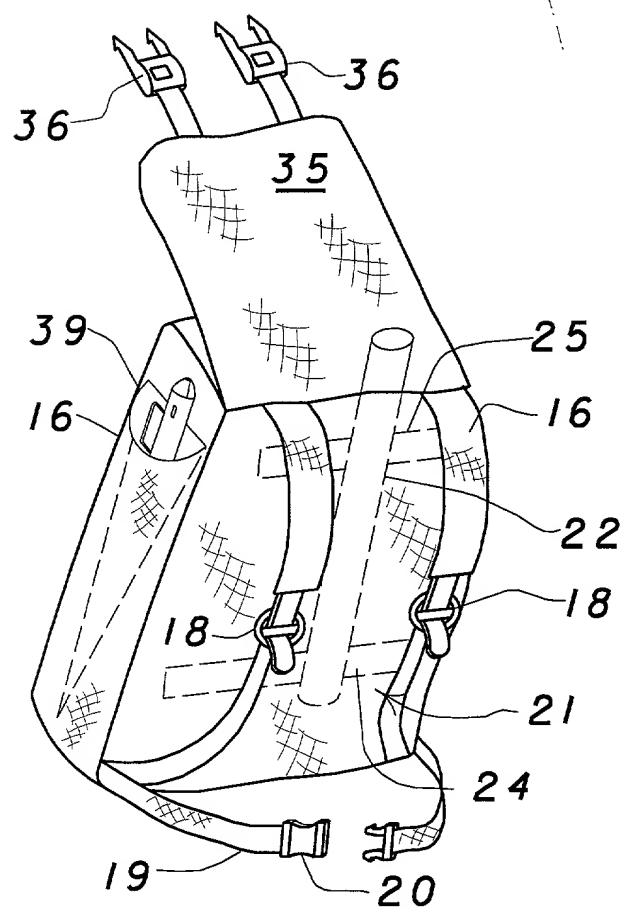
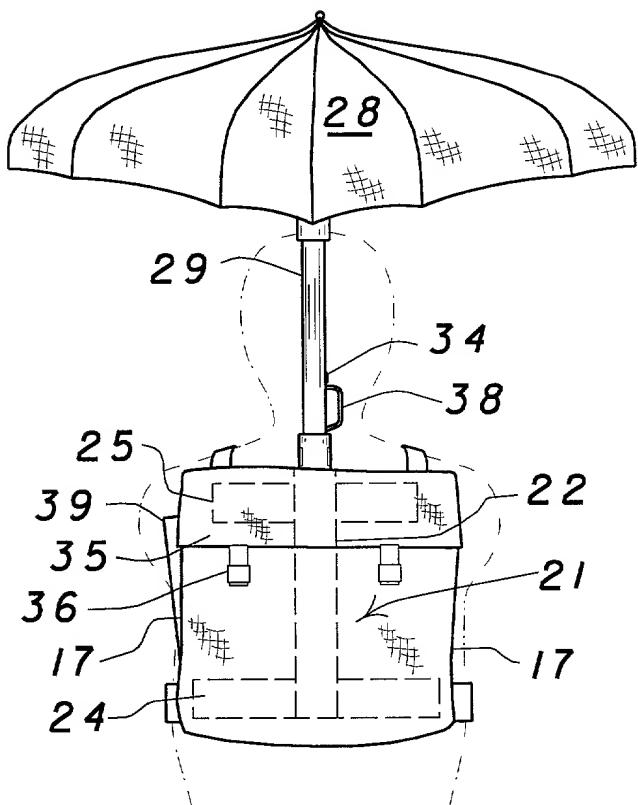
**FIG. 1**



**FIG. 2**



**FIG. 3**



**DECLARATION FOR UTILITY OR  
DESIGN  
PATENT APPLICATION  
(37 CFR 1.63)**

Declaration Submitted with Initial Filing      OR       Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)

Attorney Docket Number	
First Named Inventor	Christie
<b>COMPLETE IF KNOWN</b>	
Application Number	/
Filing Date	
Group Art Unit	
Examiner Name	

As a below named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**UMBRELLA MOUNTABLE ON A BACKPACK**

the specification of which

*(Title of the Invention)*

is attached hereto

OR

was filed on (MM/DD/YYYY)

as United States Application Number or PCT International

Application Number  and was amended on (MM/DD/YYYY)  (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached? YES	Certified Copy Attached? NO
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto:

I hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below.

Application Number(s)	Filing Date (MM/DD/YYYY)	<input type="checkbox"/> Additional provisional application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

# DECLARATION — Utility or Design Patent Application

I hereby claim the benefit under 35 U.S.C. 120 of any United States application(s), or 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

U.S. Parent Application or PCT Parent Number	Parent Filing Date (MM/DD/YYYY)	Parent Patent Number <i>(if applicable)</i>

Additional U.S. or PCT international application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

As a named inventor, I hereby appoint the following registered practitioner(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

<input type="checkbox"/> Customer Number <span style="border: 1px solid black; padding: 2px 10px;"> </span>	<b>OR</b>	<input checked="" type="checkbox"/> Registered practitioner(s) name/registration number listed below <span style="border: 1px solid black; padding: 2px 10px;"> </span>
		<i>Place Customer Number Bar Code Label here</i>

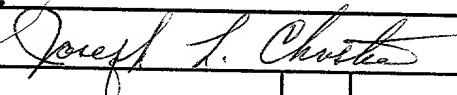
Name	Registration Number	Name	Registration Number
Norman B. Rainer	18,925		

Additional registered practitioner(s) named on supplemental Registered Practitioner Information sheet PTO/SB/02C attached hereto.

Direct all correspondence to:  Customer Number or Bar Code Label   OR  Correspondence address below

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City	Richmond	State	VA	ZIP	23229
Country	USA	Telephone	(804) 288-7109		Fax (804) 282-1325

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name of Sole or First Inventor:		<input type="checkbox"/> A petition has been filed for this unsigned inventor					
Given Name (first and middle if any)			Family Name or Surname				
Joseph L.			Christie				
Inventor's Signature						Date	7-29-00
Residence: City	Channelview	State	TX	Country	USA	Citizenship	USA
Post Office Address	1442 Pennygent Lane						
Post Office Address							
City	Channelview	State	TX	ZIP	77530	Country	USA
<input type="checkbox"/> Additional inventors are being named on the _____ supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto							